## EXHIBIT E

# ESCALATION ORICESS FOR NON-TYPE 1 CHANGE CONTROL ITEMS

## Escalation Process for non-Type 1 Change Control Items Guidelines

- Process will include items that are defined as within the Change Control scope per the Industry Change
  Control agreement (e.g., scheduling, prioritization, etc.). The expectation is that most items will have already
  been assigned a Change Request("CR") number.
- Items for escalation should have been shared with the industry as defined in the Industry Change Control Agreement.
- Escalations can involve issues related to the Change Control process itself.
- The expectation is that escalation should occur only after normal Change Control procedures (e.g., communication timelines) have occurred per the Industry Change Control agreement for each CR Type.
- Two Levels of escalation will be used. They include:
  - Level 1: CLEC Change Control Director (or designated agent) to Bell Atlantic Change Control Director (Michael Toothman)
  - Level 2: CLEC Vice President (or designated agent) to Bell Atlantic Vice President (Marion Jordan)
- Each level will go through the same Cycle, which is described below.
- All escalation communications must be distributed to the industry and BA Change Control email unless there
  is a proprietary issue.. If the CLEC has not circulated a nonproprietary request to the e-mail list, BA will
  forward the request to the list.

### Cycle

- Item must be formally escalated as an e-mail sent to the appropriate escalation level within Bell Atlantic with a copy to the industry and BA Change Control e-mail.
- Subject of e-mail must be CLEC (CLEC Name) ESCALATION-CR#-Level of Escalation
- Content of e-mail must include
  - Definition and escalation of item.
  - History of item.
  - Reason for escalation.
  - Desired outcome of CLEC.
  - Impact to CLEC of not meeting the desired outcome or item remaining on current course of action as previously discussed at the Industry Change Control Meeting.
  - Contact information for appropriate Level including Name, Title, Phone Number, and E-mail ID.
- For Level 2 escalation, it is not necessary to repeat information. However, the e-mail submission should include any additional information since the last distribution, including the reason that the matter could not be resolved at Level 1.
- Bell Atlantic will reply to escalation request with acknowledgement of receipt within 1 business day and begin escalation process through Level of escalation.
- Within 5 business days of receipt (4 from acknowledgement), Bell Atlantic Change Control appropriate
  executive (Level 1-Director (Michael Toothman) or Level 2-Vice President (Marion Jordan)) will reply
  through BA Change Control with Bell Atlantic position and explanation for that position.
- The escalating CLEC should respond to Bell Atlantic within 5 days as to whether escalation will continue or the Bell Atlantic response has been accepted as closure to the item.
- If the Bell Atlantic position suggests a change in the current disposition of the item (i.e., what has already been communicated to the industry), a conference call will be held within 1 business day of the BA decision in order to arrive at industry consensus with the appropriate executives.
- Bell Atlantic will publish the outcome of the conference call to the industry via e-mail.
- For Type 1 issues, the escalation process is agreed to allow Bell Atlantic a one day turnaround rather than 5 for each cycle of escalation.
- If unsatisfied with an outcome, either party can seek appropriate relief.

## **EXHIBIT F**

## JOINT IMPLEMENTATION SPECIFICATION – ELECTRONIC BONDING TROUBLE ADMINISTRATION

## MCI / Bell Atlantic

## ELECTRONIC BONDING TROUBLE ADMINISTRATION LOCAL SERVICES

Joint Implementation Specification

Version 1.0

Issue Date: October 22, 1999

## TABLE OF CONTENTS

1.0	INTRODUCTION SCOPE	4
1.1	BASIS AND SCOPE	
	1.1 Principal Entities	٠ 4
	1.2 Overview of the Document	4
1.2	STATEMENT OF SPECIFICATION	··· 7
1.3	SATISFACTION OF SPECIFICATION	Δ
1.4	IMPLEMENTING THE SPECIFICATION	4
2.0	CHANGE MANAGEMENT	
2.0		
2.1	DEFINITION	6
2.2	System Requirements	6
2.3	PROCEDURE	<del>(</del>
2.4	CHANGE CONTROL	7
3.0	COMMUNICATION	8
3.1	Access Topology	
3.2	Transport Layer	
4.0	SECURITY	9
4.1	PHYSICAL	c
4.2	ASSOCIATION AND OPERATION ACCESS CONTROL	9
4.	2.1 Login/password assignment process	9
5.0	BUSINESS ISSUES/INFORMATION EXCHANGE	
3.0		
5.1	BELL ATLANTIC TROUBLE ADMINISTRATION OSSS	
5.2	TIMEFRAMES	. 10
5.3	BELL A FLANTIC REQUIREMENTS FOR MILL	. 10
6.0	ERRORS/FALLBACK REPORTING	
	ERRORS/FALLBACK REPORTING	. 11
6.0 7.0		. 11
	PERFORMANCE	. 11 . 11
7.0	PERFORMANCE  RESPONSE TIME  TRANSACTION SUCCESS RATE	. 11 . 11 . 11
7.0 7.1	PERFORMANCE  RESPONSE TIME  TRANSACTION SUCCESS RATE  AVAILABILITY	. 11 . 11 . 11 . 11
7.0 7.1 7.2 7.3 7.	PERFORMANCE  RESPONSE TIME  TRANSACTION SUCCESS RATE  AVAILABILITY  3.1 OSI Gateway	. 11 . 11 . 11 . 11
7.0 7.1 7.2 7.3 7. 7.	PERFORMANCE  RESPONSE TIME  TRANSACTION SUCCESS RATE  AVAILABILITY  3. 1 OSI Gateway  3. 2 OSS Systems	. 11 . 11 . 11 . 11 . 11 . 17
7.0 7.1 7.2 7.3 7. 7. 7.4	PERFORMANCE  RESPONSE TIME  TRANSACTION SUCCESS RATE  AVAILABILITY  3. I OSI Gateway  3. 2 OSS Systems  RELIABILITY	. 11 . 11 . 11 . 11 . 11 . 17 . 77 . 13
7.0 7.1 7.2 7.3 7. 7.	PERFORMANCE  RESPONSE TIME  TRANSACTION SUCCESS RATE  AVAILABILITY  3.1 OSI Gateway  3.2 OSS Systems  RELIABILITY  THROUGHPUT	. 11 . 11 . 11 . 11 . 11 . 13 . 13
7.0 7.1 7.2 7.3 7. 7. 7.4	PERFORMANCE  RESPONSE TIME  TRANSACTION SUCCESS RATE  AVAILABILITY  3. I OSI Gateway  3. 2 OSS Systems  RELIABILITY	. 11 . 11 . 11 . 11 . 11 . 13 . 13
7.0 7.1 7.2 7.3 7. 7.4 7.5 <b>8.0</b>	PERFORMANCE  RESPONSE TIME  TRANSACTION SUCCESS RATE  AVAILABILITY  3.1 OSI Gateway  3.2 OSS Systems  RELIABILITY  THROUGHPUT  RECOVERY	. 11 . 11 . 11 . 11 . 11 . 13 . 13
7.0 7.1 7.2 7.3 7. 7. 7.4 7.5 8.0 8.1	PERFORMANCE  RESPONSE TIME  TRANSACTION SUCCESS RATE  AVAILABILITY  3.1 OSI Gateway  3.2 OSS Systems  RELIABILITY  THROUGHPUT  RECOVERY  LINK DOWN BETWEEN GATEWAYS	. 11 . 11 . 11 . 11 . 11 . 11 . 11 . 11
7.0 7.1 7.2 7.3 7. 7.4 7.5 <b>8.0</b> 8.1 8.	PERFORMANCE  RESPONSE TIME  TRANSACTION SUCCESS RATE  AVAILABILITY  3.1 OSI Gateway  3.2 OSS Systems  RELIABILITY  THROUGHPUT  RECOVERY  LINK DOWN BETWEEN GATEWAYS  1.1 Bell Atlantic Work Center Procedures	. 11 . 11 . 11 . 11 . 11 . 11 . 11 . 11
7.0 7.1 7.2 7.3 7. 7.4 7.5 <b>8.0</b> 8.1 8.2	PERFORMANCE  RESPONSE TIME  TRANSACTION SUCCESS RATE  AVAILABILITY  3.1 OSI Gateway  3.2 OSS Systems  RELIABILITY  THROUGHPUT  RECOVERY  LINK DOWN BETWEEN GATEWAYS	. 11 . 11 . 11 . 11 . 11 . 11 . 11 . 13 . 13
7.0 7.1 7.2 7.3 7. 7.4 7.5 <b>8.0</b> 8.1 8.2	PERFORMANCE  RESPONSE TIME TRANSACTION SUCCESS RATE AVAILABILITY 3.1 OSI Gateway 3.2 OSS Systems RELIABILITY THROUGHPUT  RECOVERY  LINK DOWN BETWEEN GATEWAYS 1.1 Bell Atlantic Work Center Procedures LINK BETWEEN GATEWAYS IS RESTORED 2.1 Bell Atlantic Work Center Procedures TACS SYSTEM OR MCI GATEWAY IS DOWN	. 11 . 11 . 11 . 11 . 11 . 13 . 13 . 14 . 14 . 14 . 14 . 15
7.0 7.1 7.2 7.3 7. 7.4 7.5 8.0 8.1 8.2 8.8 8.3	PERFORMANCE  RESPONSE TIME  TRANSACTION SUCCESS RATE  AVAILABILITY  3. I OSI Gateway  3. 2 OSS Systems  RELIABILITY  THROUGHPUT  RECOVERY  LINK DOWN BETWEEN GATEWAYS  I. I Bell Atlantic Work Center Procedures  LINK BETWEEN GATEWAYS IS RESTORED  2. I Bell Atlantic Work Center Procedures  TACS SYSTEM OR MCI GATEWAY IS DOWN  3. I Bell Atlantic Work Center Procedure	. 11 . 11 . 11 . 11 . 11 . 11 . 11 . 13 . 13
7.0 7.1 7.2 7.3 7. 7.4 7.5 8.0 8.1 8.2 8.8 8.3 8.4	PERFORMANCE  RESPONSE TIME  TRANSACTION SUCCESS RATE  AVAILABILITY  3.1 OSI Gateway  3.2 OSS Systems  RELIABILITY  THROUGHPUT  RECOVERY  LINK DOWN BETWEEN GATEWAYS  1.1 Bell Atlantic Work Center Procedures  LINK BETWEEN GATEWAYS IS RESTORED  2.1 Bell Atlantic Work Center Procedures  TACS SYSTEM OR MCI GATEWAY IS DOWN  3.1 Bell Atlantic Work Center Procedure  TACS SYSTEM OR MCI GATEWAY IS DOWN  3.1 Bell Atlantic Work Center Procedure  TACS SYSTEM OR MCI GATEWAY IS RESTORED	. 11 . 11 . 11 . 11 . 11 . 13 . 13 . 14 . 14 . 14 . 15 . 15 . 15
7.0 7.1 7.2 7.3 7. 7.4 7.5 8.0 8.1 8.8 8.2 8.8 8.3 8.4 8.4	PERFORMANCE  RESPONSE TIME TRANSACTION SUCCESS RATE AVAILABILITY 3.1 OSI Gateway 3.2 OSS Systems RELIABILITY THROUGHPUT  RECOVERY  LINK DOWN BETWEEN GATEWAYS 1.1 Bell Atlantic Work Center Procedures LINK BETWEEN GATEWAYS IS RESTORED 2.1 Bell Atlantic Work Center Procedures TACS SYSTEM OR MCI GATEWAY IS DOWN 3.1 Bell Atlantic Work Center Procedure TACS SYSTEM OR MCI GATEWAY IS RESTORED 4.1 Bell Atlantic Work Center Procedure	. 11 . 11 . 11 . 11 . 11 . 13 . 13 . 14 . 14 . 14 . 15 . 15 . 15
7.0 7.1 7.2 7.3 7. 7.4 7.5 8.0 8.1 8.2 8.8 8.3 8.4 8.8 8.5	PERFORMANCE  RESPONSE TIME TRANSACTION SUCCESS RATE AVAILABILITY 3.1 OSI Gateway. 3.2 OSS Systems RELIABILITY THROUGHPUT  RECOVERY  LINK DOWN BETWEEN GATEWAYS 1.1 Bell Atlantic Work Center Procedures LINK BETWEEN GATEWAYS IS RESTORED 2.1 Bell Atlantic Work Center Procedures TACS SYSTEM OR MCI GATEWAY IS DOWN 3.1 Bell Atlantic Work Center Procedure TACS SYSTEM OR MCI GATEWAY IS RESTORED 4.1 Bell Atlantic Work Center Procedure BELL ATLANTIC GATEWAY IS DOWN  3.2 Bell Atlantic Work Center Procedure BELL ATLANTIC GATEWAY IS DOWN	. 11 . 11 . 11 . 11 . 11 . 11 . 13 . 13
7.0 7.1 7.2 7.3 7. 7.4 7.5 8.0 8.1 8.2 8.8 8.3 8.4 8.8 8.5 8.6	PERFORMANCE  RESPONSE TIME.  TRANSACTION SUCCESS RATE  AVAILABILITY  3. OSI Gateway.  3.2 OSS Systems  RELIABILITY  THROUGHPUT  RECOVERY  LINK DOWN BETWEEN GATEWAYS  LINK BETWEEN GATEWAYS IS RESTORED  2.1 Bell Atlantic Work Center Procedures  TACS SYSTEM OR MCI GATEWAY IS DOWN  3.1 Bell Atlantic Work Center Procedure  TACS SYSTEM OR MCI GATEWAY IS DOWN  3.1 Bell Atlantic Work Center Procedure  TACS SYSTEM OR MCI GATEWAY IS RESTORED  4.1 Bell Atlantic Work Center Procedure  BELL ATLANTIC GATEWAY IS DOWN  5.1 Bell Atlantic Work Center Procedures  BELL ATLANTIC GATEWAY IS DOWN  5.1 Bell Atlantic Work Center Procedures	. 11 . 11 . 11 . 11 . 11 . 11 . 13 . 13
7.0 7.1 7.2 7.3 7. 7.4 7.5 8.0 8.1 8.2 8.8 8.3 8.4 8.8 8.5 8.6	PERFORMANCE  RESPONSE TIME TRANSACTION SUCCESS RATE AVAILABILITY 3.1 OSI Gateway 3.2 OSS Systems RELIABILITY THROUGHPUT  RECOVERY  LINK DOWN BETWEEN GATEWAYS 1.1 Bell Atlantic Work Center Procedures LINK BETWEEN GATEWAYS IS RESTORED 2.1 Bell Atlantic Work Center Procedures TACS SYSTEM OR MCI GATEWAY IS DOWN 3.1 Bell Atlantic Work Center Procedure TACS SYSTEM OR MCI GATEWAY IS RESTORED 4.1 Bell Atlantic Work Center Procedure BELL ATLANTIC GATEWAY IS DOWN 5.1 Bell Atlantic Work Center Procedure BELL ATLANTIC GATEWAY IS DOWN 5.1 Bell Atlantic Work Center Procedure BELL ATLANTIC GATEWAY IS DOWN 5.1 Bell Atlantic Work Center Procedure BELL ATLANTIC GATEWAY IS RESTORED	. 11 . 11 . 11 . 11 . 11 . 13 . 13 . 14 . 14 . 14 . 15 . 15 . 15 . 15
7.0 7.1 7.2 7.3 7. 7.4 7.5 8.0 8.1 8.2 8.8 8.3 8.4 8.8 8.6 8.6 8.6	PERFORMANCE  RESPONSE TIME TRANSACTION SUCCESS RATE AVAILABILITY 3.1 OSI Gateway. 3.2 OSS Systems RELIABILITY THROUGHPUT  RECOVERY  LINK DOWN BETWEEN GATEWAYS 1.1 Bell Atlantic Work Center Procedures LINK BETWEEN GATEWAYS IS RESTORED. 2.1 Bell Atlantic Work Center Procedures. TACS SYSTEM OR MCI GATEWAY IS DOWN 3.1 Bell Atlantic Work Center Procedure TACS SYSTEM OR MCI GATEWAY IS RESTORED 4.1 Bell Atlantic Work Center Procedure BELL ATLANTIC GATEWAY IS DOWN 5.1 Bell Atlantic Work Center Procedures BELL ATLANTIC GATEWAY IS RESTORED	. 11 . 11 . 11 . 11 . 11 . 13 . 13 . 14 . 14 . 14 . 15 . 15 . 15 . 15
7.0 7.1 7.2 7.3 7. 7.4 7.5 8.0 8.1 8.2 8.3 8.4 8.5 8.6 8.6 8.7	PERFORMANCE  RESPONSE TIME TRANSACTION SUCCESS RATE AVAILABILITY 3.1 OSI Gateway 3.2 OSS Systems RELIABILITY THROUGHPUT  RECOVERY  LINK DOWN BETWEEN GATEWAYS 1.1 Bell Atlantic Work Center Procedures LINK BETWEEN GATEWAYS IS RESTORED 2.1 Bell Atlantic Work Center Procedures TACS SYSTEM OR MCI GATEWAY IS DOWN 3.1 Bell Atlantic Work Center Procedure TACS SYSTEM OR MCI GATEWAY IS RESTORED 4.1 Bell Atlantic Work Center Procedure BELL ATLANTIC GATEWAY IS DOWN 5.1 Bell Atlantic Work Center Procedure BELL ATLANTIC GATEWAY IS DOWN 5.1 Bell Atlantic Work Center Procedure BELL ATLANTIC GATEWAY IS DOWN 5.1 Bell Atlantic Work Center Procedure BELL ATLANTIC GATEWAY IS RESTORED	. 11 . 11 . 11 . 11 . 11 . 13 . 13 . 13

8.8.1 Bell Atlantic Work Center Procedures	16
8.9 BELL ATLANTIC GATEWAY TO BELL ATLANTIC OSS LINK IS DOWN	16
8.9.1 Bell Atlantic Work Center Procedures	16
8.10 BELL ATLANTIC GATEWAY TO BELL ATLANTIC OSS IS RESTORED	16
8.10.1 Bell Atlantic Work Center Procedures	16
8.11 BELL ATLANTIC OSS IS DOWN	16
8.11.1 Bell Atlantic Work Center Procedures	16
8.12 BELL ATLANTIC OSS IS RESTORED	16
8.12.1 Bell Atlantic Work Center Procedures	
8.13 CONTACT LIST	
8.14 DISASTER RECOVERY	
8.14.1 MCI Disaster Recovery	<i>17</i>
0.0 TESTING	18
1251114	
10.0 INITIAL PROJECT MILESTONES	19
10.1 JOINT SCHEDULE, KEY MILESTONES:	
11.0 OTHER	19
11.1 NAME BINDINGS	19
11.2 RDN STRINGS	
11.3 DATA MAPPING FIELD PARAMETERS	19
2.0 ATTACHMENTS	
ATTACHMENT 12.1 BELL ATLANTIC CIRCUIT CROSS REFERENCE IDENTIFICATION INDICATORS	20
ATTACHMENT 12.2	: IVIAPPING
21	26
ATTACHMENT 12.3 T1227/WFA/LMOS TROUBLEFOUND CODE MAPPING	20
ATTACHMENT 12.4 11227 WFA/LMOS TROUBLESTATUS CODE MAPPING	20 20
ATTACHMENT 12.5 JIS CHANGE CONTROL FORM	mpor I oc
ATTACHMENT 12.6	II KOL LOO
ATTACHMENT 12.7 ATTRIBUTE SUPPLIED BY MANAGER AND AGENT BASED ON T1.227 AND T1.228	31
ATTACHMENT 12.7 ATTRIBUTE SUPPLIED BY MANAGER AND AGENT BASED ON 11.227 AND 11.228	44
ATTACHMENT 12.9 MLT RESULTS	45
ATTACHMENT 12.9 INC.1 RESULTS	46

### 1.0 INTRODUCTION SCOPE

### 1.1 Basis and Scope

Under Section 5.2.1 of Attachment VIII of the Interconnection Agreements between the Bell Atlantic telephone operating companies ("Bell Atlantic") and MCImetro ("MCI"), Bell Atlantic is required to provide electronic interfaces that permit MCI maintenance personnel and customer service representatives to perform specified functions. The purpose of this document is to commence implementation of that provision. It outlines the various responsibilities of both MCI and Bell Atlantic in the implementation of Electronic Bonding for Trouble Administration and MLT in support of local services and all local services circuit types using ANSI Standards T1.227-1995, T1.228-1995 and T1.262-1998. Bell Atlantic and MCI have mutually agreed that the ANSI Standard T1.227a-1998 will not be used at this time to support the local services. Bell Atlantic refers collectively to the Bell Atlantic telephone operating companies providing services in the following jurisdictions – DC, DE, MD, NJ, PA, VA, WV, NY, RI, MA, VT, CT, NH and ME. MCI refers collectively to MCImetro Access Transmission Services LLC and MCImetro Access Transmission Services of Virginia, Inc.

### 1.1.1 Principal Entities

MCI and Bell Atlantic are the principal entities involved in this Joint Implementation Specification (JIS).

### 1.1.2 Overview of the Document

This document is an addendum to the MCI Electronic Bonding Functional Requirements and Design Version 5.0 dated October 15, 1998. This document does not affect any existing Joint Implementation Agreements for any other services.

This document is not a contract. This document should be considered a living document, which will evolve with system expertise and maturation of the product. Changes to this document and process will be controlled as stated in the Change Management and Change Control sections defined in Section 2.

### 1.2 Statement of Specification

As set forth in Section 5.2.1 of the Interconnection Agreements between MCI and Bell Atlantic, both MCI and Bell Atlantic have agreed that Bell Atlantic provision of maintenance functions, trouble administration and MLT should be handled through electronic bonding, and a standard implementation of the ANSI T1.227-1995/T1.228-1995, T1.262 document and the MCI Electronic Bonding Functional Requirements and Design Version 5.0 dated Oct 15, 1998.

### 1.3 Satisfaction of Specification

All agreements related to implementation of Electronic Bonding for Trouble Administration and MLT will be satisfied and completed at the conclusion of user acceptance testing, if the following criteria are met:

All outstanding issues resulting from testing are mutually resolved or mutual agreement is reached that any outstanding issue is acceptable to both companies' user communities for a mutually agreeable period of time before permanent resolution.

### 1.4 Implementing the Specification

MCI and Bell Atlantic will complete the JIS by November 1, 1999 unless mutually modified by further agreement from both companies.

Logistics of Conducting Business:

Minutes and Documentation

All meetings will be documented with minutes. The taking and distribution of these minutes will be alternated between companies.

<u>Channels of Communication</u>
MCI and Bell Atlantic will use facsimile transmission or email.

<u>Updates to the Specification</u> Covered by change management (see Section 2).

A list of the contact person for both MCI and Bell Atlantic is shown on Attachment 12.10.

### 2.0 CHANGE MANAGEMENT

### 2.1 Definition

As both companies develop their gateway interfaces and internal Operational Support Systems (OSSs), changes may occur. These changes or modifications will need to be reflected in this document and follow an established change control process to ensure the success of the project.

### 2.2 System Requirements

System requirements for electronic bonding may change for many reasons, some of which may be:

- telecommunications industry changes,
- domestic/international standards,
- FCC regulations,
- work center methods or procedures,
- project funding, schedules or objectives,
- reconsideration of the requirements by either MCI or Bell Atlantic with agreement from the other party and as outlined in the change control portion of the document.

Since change in large system development efforts is inevitable for the previously mentioned reasons, it is considered to be counterproductive to freeze the requirements until several months after the baseline date. Therefore, these changes will be monitored, tracked, and will be mutually agreed/disagreed upon and implemented using a change control process.

Changes to this document will be according to an update process that is consistent with ISO 9000.

### 2.3 Procedure

The procedure to submit a change request, by either MCI or Bell Atlantic, is generally characterized in the following terms:

Either company may submit the request.

Both companies will maintain ownership of this JIS specification.

Both MCI and Bell Atlantic will provide a single point of contact for negotiation of all modifications.

Both MCI and Bell Atlantic have mutual decision-making responsibility for all modifications to the JIS specifications. A requested change from either company will be submitted on the attached JIS Change Control Form to the MCI/Bell Atlantic change coordinator.

The Bell Atlantic single point of contact will maintain a change request log. Internal review will be held prior to discussion and final agreement on changes.

### 2.4 Change Control

Proposed changes to the JIS will follow the process outlined in this section. This process is being implemented to ensure that each company's Electronic Bonding (EB) team evaluates all potential impacts of any changes.

MCI and Bell Atlantic will utilize their own internal change control processes for documenting and evaluating potential impacts. The JIS Change Control Form will be used to communicate information concerning the proposed changes.

Step by Step Process for Change Control between MCI and Bell Atlantic:

- Whichever company initiates the request for the change will fill out the JIS Change Control Form. The project manager for each company will ensure the accuracy and completeness of the form.
- Once completed, the JIS Change Control Form will be distributed to the other company's Project Manager. The project managers within MCI and Bell Atlantic will distribute the Change Control Form as well as any pursuant-approved JIS changes to their team members.
- 3. Bell Atlantic Project Manager will be responsible for maintaining the JIS Change Control Log and assigning a Change Control Log Number (#).

Log information will include:

- 1. MCI Internal Change Control Number
- 2. Bell Atlantic Internal Change Control Number
- 3. Log Number
- 4. Log Title
- 5. Description
- 6. Originator Date
- 7. Target Date
- 8. Completion Date
- 9. Approved/Disapproved and Date
- 4. The impact evaluation and response to the impact review within both companies will occur within two weeks of the origination date of the JIS Change Control Form. (The origination date should be the date of delivery to the project managers.)
- 5. The JIS Change Control Form will be inserted into the JIS Appendix with the appropriate indication of "Approved" or "Disapproved". If approved, the JIS Change Control Form will include the appropriate signatures with changed pages attached. In addition, bold and underline will be used to indicate changes in the document. The project managers will disseminate changed pages so that each team member can be responsible for maintaining his/her copy.

If the change is rejected, an appropriate explanation of the reason for rejection should be stated clearly on the form. In addition, a conference call will take place between the appropriate project manager (rejecter) and the originator of the change in an attempt to reach a compromise or consensus on the detailed issue.

6. Bell Atlantic project manager will ensure completion of the status log for each JIS Change Control issued. The log must indicate approval or rejection.

7. Each company's project manager will distribute updates to their internal EB team members.

Examples of the JIS Change Control Form and Change Control Log are shown as: Attachment 12.5- JIS Change Control Form Attachment 12.6 - Change Control Log

8. Bell Atlantic project manager will maintain the current version of the JIS document

### 3.0 **COMMUNICATION**

### 3.1 Access Topology

A copy of the EB access topology is attached in attachment 12.8.

### 3.2 Transport Layer

MCI requests the use of TP4 over X.25. Bell Atlantic agrees to use the TP4 protocol.

MCI and Bell Atlantic will each arrange and manage access to Tymnet independently and MCI assumes costs for this access.

### 4.0 SECURITY

MCI and Bell Atlantic will be individually responsible for the establishment and implementation of procedures to provide physical site security for their individual hardware and software systems and associated elements. This security includes:

- · forced entry,
- acts of violence,
- internal sabotage.

This security shall be in effect at all MCI, Bell Atlantic and vendor locations, which are involved, in electronic bonding.

### 4.1 Physical

MCI and Bell Atlantic will follow their internal corporate security guidelines.

### 4.2 Association and Operation Access Control

MCI and Bell Atlantic agree to use DES CBC encryption.

### 4.2.1 Login/password assignment process

The MCI/Bell Atlantic System Administrator or EB SPOC will control the passing of encryption keys used for password control utilizing confidential methods.

EB Single Point Of Contact (EB SPOC) is a 24 by 7 network management group that responds to EB system availability calls. Their phone number is 301-989-6870.

### 5.0 BUSINESS ISSUES/INFORMATION EXCHANGE

### 5.1 Bell Atlantic Trouble Administration OSSs

There are two OSSs utilized by Bell Atlantic for processing troubles. These OSSs have unique and different functions related to the way data is received, processed and stored. The following explains the functions and service supported.

WFA - Work and Force Administration

This Bell Atlantic OSS supports the provisioning and maintenance of Special, Carrier and Message Services. WFA provides force administration, trouble ticket tracking, service order tracking and electronic interfaces between various work groups. WFA also maintains the circuit design and history for supported services.

LMOS - Loop Maintenance Operating System

This Bell Atlantic OSS supports the maintenance of POTS type services. LMOS provides trouble ticket tracking and an electronic interface to the dispatch organizations. LMOS supports POTS, 800 and WATS circuits for access customers with two wire, single-central office application service.

Because of unique technician pools in some areas, it is possible for single central office circuits to be processed using the WFA system. However, the HiCap, DS1, T1 and other services will never be processed using LMOS.

Non-fielded LMOS attributes are placed in the narrative and may be truncated due to a 102 character restriction of the narrative field.

A detail description of the attributes supplied by manager and agent based on T1.227 and T1.228 and how they are supported by the Bell Atlantic WFA and LMOS systems is included in attachment 12.7.

A list of the types of circuit supported in the local service is shown in Attachment 12.1.

A listing of the T1.227 Trouble Type Codes, Trouble Found Codes, and Trouble Status Codes are shown in Attachment 12.2, 12.3 and 12.4 respectively.

### 5.2 Timeframes

Should MCI determine a need for any attributes to be removed from the list in Section 5.1, a timeframe for system updates must be negotiated.

### 5.3 Bell Atlantic Requirements for MLT

The Bell Atlantic gateway was upgraded in late 1999 to provide an interface to the Delphi system in order for MCI to perform the MLT on their POTS circuits (business and residential). Attachment 12.9 outlines the ANSI T1.262-1998 standard of the attributes of the MLT results. Bell Atlantic has a business requirement for MCI to perform MLT on their POTS circuits before submitting a trouble report. However, trouble reports submitted by MCI will not be rejected if MLT is not performed.

Delphi - is an advanced, intelligent service analysis and testing system that provides computerized loop and network testing capabilities.

### 6.0 ERRORS/FALLBACK REPORTING

The Bell Atlantic gateway supports the following error in fallback reporting as defined in the ECIC standards.

Fallback Report Error Code	Error Description	
0	Circuit Mismatch	

### 7.0 PERFORMANCE

### 7.1 Response Time

Bell Atlantic 's response time goal will be 10 seconds or less on average with no transaction taking more than 30 seconds as outlined by the MCI Electronic Bonding Functional Requirements and Design Version 5.0 dated October 15, 1998 and is defined from MCI's gateway to receipt of a response from Bell Atlantic back to MCI's gateway.

### 7.2 Transaction Success Rate

Transaction Success Rate shall be measured by a monthly report produced by Bell Atlantic if needed on create failures.

Bell Atlantic's goal is to respond (either confirmation or rejection) to Manager initiated transactions 99.99% of the time. Bell Atlantic is not able to monitor total transaction success rate from an MCI perspective because Bell Atlantic cannot see the number of total trouble reports attempted, only the total number of messages received.

Other factors that may impact the open trouble report success rate are:

- accuracy of Circuit ID entered,
- OSS down for maintenance,
- link down,
- synchronization of Circuit ID information in both MCI and Bell Atlantic 's systems.

### Bell Atlantic's goal is to achieve:

- Circuit match rate = 95.0%
- Successful referral rate = 95.0 %
- Clean ticket rate = 95.0%
- Reliability = 98.8 %

### 7.3 Availability

### 7.3.1 OSI Gateway

The OSI Gateways will be available 24 hours a day, 7 days a week, except for coordinated maintenance and nightly restarts of the Metakey Transways. This includes buffered information awaiting transmission.

Coordinated Maintenance is defined as software upgrades due to agreed upon systems changes, enhancements to system hardware or software, or maintenance fixes.

### 7.3.2 OSS Systems

WFA/OSS (Bell Atlantic)

WFA (Work Force Administration) is the Bell Atlantic OSS supporting the tracking and management of activities for repairing faults. Available 24 hours a day in all WFA work center areas except for the following:

WFA Center	Saturday
Bell Atlantic - South - DC	TIME 00:00 - 06:30 EST
Bell Atlantic - South - MD	TIME 00:00 - 06:30 EST
Bell Atlantic - South - VA	TIME 00:00 - 06:30 EST
Bell Atlantic - South - WV	TIME 00:00 - 06:30 EST
Bell Atlantic - South - NJ	TIME 00:00 - 06:30 EST
Bell Atlantic - South - PA	TIME 00:00 - 06:30 EST
Bell Atlantic - South - DE	TIME 00:00 - 06:30 EST
Bell Atlantic - North - NY	TIME 00:00 - 06:30 EST
Bell-Atlantic - North - MA	TIME 00:00 – 06:30 EST
Bell-Atlantic - North - VT	TIME 00:00 - 06:30 EST
Bell-Atlantic - North - RI	TIME 00:00 - 06:30 EST
Bell-Atlantic - North - ME	TIME 00:00 – 06:30 EST
Bell-Atlantic - North - NH	TIME 00:00 – 06:30 EST

### LMOS/OSS (Bell Atlantic)

LMOS (Loop Maintenance Operations System) is the Bell Atlantic database utilized by Centralized Repair Service Attendant Bureaus. It controls records of Special Access Services, FGA and WATS for the purpose of maintenance.

Available 24 hours a day in all LMOS work center areas except for:

LMOS Center	Monday thru Friday	Saturday	Sunday
Bell Atlantic - South - DC	Time 00:00 - 01:00 EST	Time 00:00 - 01:00 EST	Time 00:00 - 01:00 EST
			3rd Sunday of every month
			00:00 - 06:00 EST
Bell Atlantic - South - MD	Time 00:00 - 01:00 EST	Time 00:00 - 01:00 EST	Time 00:00 - 01:00 EST
	1	1	3rd Sunday of every month
			00:00 - 06:00 EST
Bell Atlantic - South - VA	Time 00:00 - 01:00 EST	Time 00:00 - 01:00 EST	Time 00:00 - 01:00 EST
		<b>}</b>	3rd Sunday of every month
			00:00 - 06:00 EST
Bell Atlantic - South - WV	Time 00:00 - 01:00 EST	Time 00:00 - 01:00 EST	Time 00:00 - 01:00 EST
			3rd Sunday of every month 00:00 - 06:00 EST
		Time 00:00 - 01:00 EST	
Bell Atlantic - South - NJ	Time 00:00 - 01:00 EST	1 Ime 00:00 = 01:00 ES1	Time 00:00 - 01:00 EST 3rd Sunday of every month
			00:00 - 06:00 EST
Bell Atlantic - South - PA	Time 00:00 = 01:00 EST	Time 00:00 = 01:00 EST	Time 00:00 - 01:00 EST
Deli Atlantic - Souti - FA	1 time 00.00 = 01.00 E31	1 mile 00.00 = 01.00 E31	3 <sup>rd</sup> Sunday of every month
		1	00:00 - 06:00 EST
Bell Atlantic - South - DE	Time 00:00 - 01:00 EST	Time 00:00 - 01:00 EST	Time 00:00 - 01:00 EST
Dell Atlantic - South - DE	1 mile 00:00 = 01:00 E31	1 mic 00:00 = 01:00 E01	3rd Sunday of every month
			00:00 - 06:00 EST
Bell Atlantic - North - NY	Time 00:00 - 03:00 EST	Time 00:00 - 06:00 EST	Time 00:00 - 06:00 EST
Bell Atlantic - North - MA	Time 00:00 - 03:00 EST	Time 00:00 - 03:00 EST	Time 00:00 - 04:00 EST
Bell Atlantic - North - RI	Time 00:00 - 03:00 EST	Time 00:00 - 03:00 EST	Time 00:00 - 04:00 EST
Bell Atlantic - North - NH	Time 00:00 - 03:00 EST	Time 00:00 - 03:00 EST	Time 00:00 - 04:00 EST
Bell Atlantic - North - ME	Time 00:00 - 03:00 EST	Time 00:00 - 03:00 EST	Time 00:00 - 04:00 EST
Bell Atlantic - North - VT	Time 00:00 - 03:00 EST	Time 00:00 - 03:00EST	Time 00:00 - 04:00 EST

TACS (MCI)
MCI's TACS System is a centralized application providing fault management capabilities
24 hours a day, 7 days per week for all MCI products and network services.

This host system will be unavailable 1 hour to 1 hour and 40 minutes, every other Saturday, for system maintenance. It is also unavailable 4 hours, once per quarter for database maintenance. The timeframes for this maintenance are negotiated quarterly with the MCI user community. Bell Atlantic will be notified 2 weeks in advance of this occurrence.

The availability of all systems is targeted at 98%.

### 7.4 Reliability

Bell Atlantic's goal is 98.80% during scheduled hours as stated in section 7.3.

### 7.5 Throughput

Bell Atlantic estimates the annual number of MCI transactions at 57,000 based on an actual count of transactions from July to August of 1999.

#### 8.0 RECOVERY

Bell Atlantic Recovery procedures are documented below. A change request will be initiated to document mutually agreed upon recovery procedures in this JIS.

#### 8.1 Link down between Gateways

#### 8.1.1 **Bell Atlantic Work Center Procedures**

- if pbort received, buffer the message
- gateway attempts to re-send the message for two minutes
- if successful, process buffer and return to EB mode if not successful, send Link Down messages to all Bell Atlantic work centers
- all work centers revert to manual procedures
- all messages/notifications continue to update the MIB
- attempt to send each message across the link

#### Link between Gateways is restored 8.2

#### 8.2.1 Bell Atlantic Work Center Procedures

- send Link Up messages to Bell Atlantic work centers
- all work centers revert to EB mode
- when Create received on a manual TTR, send TTR already exists
- resynchronize the MIB and OSS on Create

### 8.3 TACS System or MCI Gateway is Down

### 8.3.1 Bell Atlantic Work Center Procedure

After notification by MCI, the Bell Atlantic Work Center procedures will be the same as those described in Link down condition.

### 8.4 TACS System or MCI Gateway is restored

### 8.4.1 Bell Atlantic Work Center Procedure

The Bell Atlantic Work Center procedure will be the same as those described in Link restoral condition.

### 8.5 Bell Atlantic Gateway is Down

### 8.5.1 Bell Atlantic Work Center Procedures

- when Metakey Transway detects the gateway is down, all work centers are notified to revert to manual procedures
- the Metakey Transway will buffer unsuccessful messages for two minutes before notifying to revert to manual procedure
- the OSS will continue to attempt to send each message to the gateway

### 8.6 Bell Atlantic Gateway is Restored

### 8.6.1 Bell Atlantic Work Center Procedures

- the gateway reestablishes a link to the Metakey transway
- the Metakey transway notifies the work center the gateway is up
- the Bell Atlantic EB SPOC notifies the MCI EB SPOC
- the gateway MIB is undated with current status information for each TTR (estimated to complete in 5 minutes)

### 8.7 MCI Gateway to TACS Link is down

### 8.7.1 Bell Atlantic Work Center Procedure

- when resource limitation is received, the affected work center is notified to revert to manual on a per message basis
- all messages/notifications continue to update the MIB
- attempt to send each message across the link

### 8.8 MCI Gateway to TACS Link is restored

### 8.8.1 Bell Atlantic Work Center Procedures

- EB mode restarts when resource limitation no longer received

### 8.9 Bell Atlantic Gateway to Bell Atlantic OSS link is Down

### 8.9.1 Bell Atlantic Work Center Procedures

- resource limitation error is returned to MCI for message attempts
- gateway notifies the Bell Atlantic EB SPOC
- the Bell Atlantic EB SPOC notifies the affected work center to revert to manual or a per message basis

### 8.10 Bell Atlantic Gateway to Bell Atlantic OSS is restored

### 8.10.1 Bell Atlantic Work Center Procedures

- EB mode restarts automatically
- MIB is updated with current status information for each TTR currently in the MIB
- the Bell Atlantic EB SPOC notifies the affected work center that the link is restored
- if not successful, send Link Down messages to all Bell Atlantic work centers
- the Bell Atlantic EB SPOC notifies the MCI EB SPOC

### 8.11 Bell Atlantic OSS is Down

### 8.11.1 Bell Atlantic Work Center Procedures

Same as 8.9.

### 8.12 Bell Atlantic OSS is Restored

### 8.12.1 Bell Atlantic Work Center Procedures

Same as 8.10 plus:

- work center enters paper tickets
- WFA: if MCI enters a Create before BA enters the ticket, the work center will correct to the original received date and time and generate an AVC
- LMOS: paper tickets are entered into LMOS prior to notifying MCI EB SPOC of restore.

### 8.13 Contact List

A recovery contact list will be developed by the team, which will indicate the work center, TACS, WFA, LMOS and Gateway persons and numbers to be contacted during an outage condition.

### 8.14 Disaster Recovery

Bell Atlantic is in the process of developing disaster recovery procedures and processes for the gateway and all OSS systems in place, including WFA and LMOS.

In the event of any extended outage (beyond 72 hours), the following events will occur:

- Bell Atlantic and MCI will meet to determine most reasonable solution for events causing the outage
- 2. Additional circuitry or backup links will be provided, if required
- 3. Back up gateway systems will be implemented, if appropriate, for an extended outage

### 8.14.1 MCI Disaster Recovery

### EB Disaster Recovery Plan Summary

Disaster Recovery procedures will go into effect when a DISASTER as been declared at the primary Electronic Bonding site (North Royalton, Ohio). Electronic Bonding support group will be notified of the incident or disaster.

The EB Gateway support group will determine the impact to the functionality and whether the backup site in Irving, Texas needs to be activated based on the incident or disaster.

If a failover to the backup site is deemed necessary, the recovery will be coordinated within the various groups within MCI. The LECs will be notified of the failover process. An ongoing conference bridge (call) will be setup to monitor the actions that need to be dealt with during the restoration process.

Upon recovery of the EB Gateway the application will be verified for basic functionality, stability and connectivity. This will be done by the EB Gateway Team before the complete recovery/resumption of normal business operations.

The EB gateway Team will coordinate with the users, the LEC SPOCs, and EB Personnel.

The following are the EB Gateway contact numbers in case a failover needs to occur:

Systems Operation Support (SOS) 1-800-737-3026

If the failover has not occurred within 2 hours, use the following escalation list. After 2 hours, contact the EB Gateway Oncall Pager directly. If still not fixed after a total of 4 hours, contact Ron Lee. After 6 hours contact Evan Pedersen. After 8 hours contact Rick Corgill.

	Home #	Work #	Pager #	Title
EB Gateway Once	all		1-800-PAGE-MCI Pin 1934821	-
Ron Lee	719-599-7258	719-535-4327		EB Development
Evan Pedersen	719-481-2948	719-535-4591	1-888-268-2133	EB Manager
Rick Corgill	918-357-5588	918-590-2018	1-800-759-8888 Pin 1732646	Director

### 9.0 TESTING

Testing plans will be fully defined by the Joint Test Team (MCI and Bell Atlantic) in the detailed Test Plans for each testing phase. The schedule for developing test plans will be defined in the project milestone schedule in section 10.

### 10.0 INITIAL PROJECT MILESTONES

Note: This is a strawman schedule for discussion. Project milestone schedule will be managed outside the scope of this JIS

### 10.1 Joint Schedule, Key Milestones:

Key Milestones	Start Date	End Date
Baseline Joint Implementation Specification (JIS)	8/26/1999	11/1/1999
Create Test Plans - Stack to Stack (S2S) Test Plan - End to End (E2E) Test Plan	10/1/1999	11/01/1999
Perform Testing - Stack to Stack (S2S) Testing - End to End (E2E) Testing	11/01/1999	12/10/1999
Produce NVT/ORT Test Plan - Network Verification Testing (NVT) - Operations Readiness Testing (ORT) - UAT - Production Migration	12/17/1999	12/18/1999
MLT - Test system end to end testing - Production migration	11/01/1999 12/17/1999	12/10/1999 12/18/1999

### 11.0 OTHER

### 11.1 Name Bindings

This section will align with EB documentation.

### 11.2 RDN Strings

Network ID - "BAL" Account Name - "MCI-LSR" Entity identifier - "BA EB GATEWAY"

### 11.3 Data Mapping Field Parameters

MCI and Bell Atlantic have mutually provided the length of their fields in the attached Attachment 12.7. Any fields longer than those supported which are specified will cause an error and rejection of the ticket. An implementers workshop will be held, if necessary, to resolve any differences in field size or interpretation.